THE
VETERINARY RECORD.
The Official Journal of the National Veterinary Medical Association of Great Britain and Ireland.
FOUNDED BY WILLIAM HUNTING, F.R.C.V.S., 1888.

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General Articles.

A FOREWORD.

BY THE PRESIDENT OF THE N.V.M.A.

There have been some who for long have felt that the National Veterinary Medical Association of Great Britain and Ireland must be held lacking in equipment so long as it did not possess an official periodical publication, appearing at frequent intervals. It was fully realised that annual *Proceedings*, so far as they go, are useful; but it was also recognised that the mere fact that they report the doings of a general meeting held but once a year puts a natural restriction on their scope. A much more frequent appeal to the feeling of the members that they are units of a living Association seemed to be necessary. This conviction gradually spread and gained strength, and at last it was resolved that, if possible, the *Veterinary Record* should be acquired and published as the weekly journal of the Association. Delays in the consummation of the scheme were not unexpected, even by the most sanguine; but none could foresee that the most serious delay would arise out of an occurrence that has left the veterinary profession incalculably the poorer. Difficulties have, however, been overcome one by one, and with the present issue the *Veterinary Record* becomes the official mouthpiece of the Association—an event that we cannot doubt would have been consonant with the wishes of him who founded the periodical and did so much for the Association as its General Secretary.

And now with the issue of the first number of the Association's journal, it may not be out of place to state once again what we venture to think general opinion will regard as its chief function.

Beyond question, one of the functions of an Association such as ours is the propagation and diffusion of professional knowledge; but an even more important purpose is the fostering of unity. No profession, however large, can be really powerful without unity; and in a small profession unity is one of the essentials of existence. That the might and majesty of unity is recognised by the governing body of the veterinary profession is assumed from the fact that it is set forth in the chosen motto of the Royal College of Veterinary Surgeons. That its necessity was formerly recognised by the members of the profession may be concluded from the fact that the "National" was founded. That at no time since 1844 has unity been more urgently necessary than at the present is generally agreed. That the reorganisation of the "National," and the possession by its members of an official organ, will serve as a close bond of union is the fervent hope of those who have been actively concerned in recent developments.

Not that unity is desirable for purposes of aggression; but rather that by unity the rights and privileges of the profession may be declared and supported.

A weekly journal, owned and conducted by the Association, will afford the most rapid means whereby members may learn the views of each other, and will enable the Council to act with more assurance and less loss of time than has been possible with the machinery hitherto in existence. By its means, also, concerted action should be rendered easier;, and there seems little reason to doubt that it will be useful in enlightening and influencing outside bodies.

But the success of an official professional journal postulates the support of the profession it purports to represent. It must be in a position to make an uncontrovertible claim that it speaks for the profession as a whole. If the Association and its journal are to fulfil expectations, it must be possible to assert that those members of the profession who are not members of the Association are numerically and professionally negligible. Unless this can be done, however ably the journal may be conducted editorially, its full power cannot be exerted or its full value realised. Fortunately, at the present moment, every indication points in a hopeful direction; but every

member should feel it incumbent upon him to help turn probability into certainty by pressing the aims and claims of the Association on those who still stand outside. Unity is imperative. Unity of policy : unity of action : unity of support.

Though emphasis has been laid on that side of the function of the Association and its journal to which the much-abused and over-worked word "political" may be applied, the professional and scientific side must not be forgotten. As hitherto, the *Record* will serve as a medium for the publication of articles and papers dealing with professional subjects, and its pages will be open to all who have a message for their fellow-members. Indeed it is hoped that each member of the Association will consider it his duty to contribute something, much or little, to a literature that never can have been said to be too plentiful. Regret has often been expressed that so much valuable material is lost through the practitioner's disinclination to commit his experiences to paper. Now that the practitioner is the part-owner of a journal, he may be induced to overcome his disinclination, and thereby increase the utility and value of his own property. O. C. B.

THE LATE MR. JOHN MALCOLM'S INTRODUCTORY NOTE.

This issue of the *Veterinary Record* marks a new stage in the annals of the veterinary press. From now it will appear as the official organ of the National Veterinary Medical Association of Great Britain and Ireland, and for the first time in its history the veterinary profession owns a weekly paper.

Hitherto all the veterinary papers in these countries, whether issued weekly, monthly or quarterly, have been private property. The veterinary profession, as such, has had no prescriptive right of control in their management or power in directing their policies or in modifying their views. As far as the higher class of our scientific veterinary periodicals is concerned, no such power or influence has been contemplated, as obviously this would not be practicable.

With regard to the *Veterinary Record*, the case is entirely different, its scope having been largely unrestricted. The publishing of scientific papers, clinical articles, recording current events and items of personal interest, educating public opinion, discussing ethical questions, prescribing professional conduct, encouraging our progress and guarding our well-being, have all in a measure come within its province. In spite of this good account, the veterinary profession of to-day requires something more from its weekly papers than it has yet obtained, and this need can only be met by a properly-organised co-operation of the whole profession. It is a well-known fact that bodies of men in every grade of society have gained with comparative ease measures necessary for their common advancement that would have been unattainable by unorganised or individual action, however ably persisted in. Numerous illustrations of the results of well-organised co-operation must be within the knowledge of every reader, but perhaps no better or more pertinent one could be cited than that of the comparatively recent and highly successful action of the British Medical Association, with the aid of the British Medical Journal, on behalf of the medical profession. By well-organised co-operation terms have been won for the medical practitioner that could not have been effected by any other procedure.

A knowledge of the results obtained in this and other similar cases no doubt instigated the recent action of the "National." The purchase of the *Veterinary Record* on July 28th, 1920, at the thirty-seventh General Meeting of the National Veterinary Medical Association, held at the Royal (Dick) Veterinary College, is significant of the times in which we live. It is hoped that by the management, publication, and weekly issue of this paper the Association will accomplish a deep and far-reaching effect on our progress and well-being, and that by appropriate organised propaganda the need for the education of the public with regard to the special fitness of trained Veterinarians for public work, as, for example, dairy inspection and meat inspection, etc., will be generally recognised and acted upon.

It may be of interest to record that the momentous resolution to purchase the *Veterinary Record* was passed very unostentatiously, and so far as outward appearance was concerned, the decision might have been one of little consequence and not the origin of a new departure of fundamental importance. The calm acceptance of such a transformation in the Association's policy and future activities was no doubt in part due to the Association's confidence in the personal guidance of our far-seeing resolute President, and in part due to the fact that the resolution

gave effect to the universal desire of the members. Indeed, the general intention was evidenced and approval expressed no less by the significant absence of a discordant note or hesitating question than by the complete endorsement of the proceedings by one and all present.

The veterinary profession, like other large bodies, undoubtedly has its sectional differences; for example, the respective merits of whole-time and part-time inspectors. Such minor differences of opinion are capable of adjustment, and should not weaken united action and efforts for our common good. We are too small a body to present a divided front to the world outside the profession. The motto of our College, "*Vis unita fortior*," is an ideal one, and it behoves us all to secure its loyal and universal acceptance among every member. Experience clearly shows that it is only by the subordination of self and self-interests to the good of the community that any real progress can be made. Trivial rivalries and jealousies must be forgotten and a tolerant and liberal spirit adopted, for unless we can convince the public of our complete unity there can be no genuine success.

OBSERVATIONS ON JOINT-ILL PROPHYLAXIS.*

By W. W. Peggie, M.R.C.V.S., Biggar, Lanarkshire.

When I was asked by our worthy President if I would compile my observations on joint-ill prophylaxis, and make them the subject matter of a short paper for this meeting, I must admit that I very reluctantly yielded to his request. Not that I did not feel it a duty as a member of our Society to contribute a subject for discussion, but rather I felt that by taking a condition like joint-ill, which is of such vast economic importance to the agriculturalist of the present day, I would have very great difficulty in doing anything like adequate justice to the subject.

From the practitioner's point of view it is a matter I am very deeply interested in—practising as I do in a district (the upper ward of Lanarkshire) which justly claims to be the home of the Clydesdale horse. This degree of interest was forcibly instilled into me on account of the prevalence of the condition in these parts—in fact, at one time, joint-ill had reached a stage in which it had amounted almost to an epizootic, and many breeders seriously contemplated giving up the breeding of Clydesdales on account of the disappointments experienced through the death of valuable foals. Several years ago I seriously set to work in an endeavour to find out whether the losses could be lessened to a small extent.

My results in the treatment of joint-ill cases in foals of all ages were very disappointing. One felt as if one were standing by a sinking ship, as in my hands the time-honoured internal antiseptics and absorbents were little better than useless, and, in my opinion, harmful to young foals. There are, indeed, few medicaments in our pharmacopœia which cannot be classed as harmful to foals.

As a way out of my difficulty, I determined on a campaign of prevention. I realised that keen controversy existed as to the true etiology of disease. It had not been satisfactorily determined how, when, and where the causal agents gained admission to the foal's circulatory system, and finally set up the condition we term joint-ill. I decided as far as possible to attach an equal amount of significance to each theory, in the hope that certain facts gained in the course of clinical experience would overweigh others and make the task of eliminating the actual cause more easy.

The disease under consideration may be regarded as a septic condition, which may assume one or other of two forms:—

(1) The acute, septicæmic, rapidly fatal type in which death takes place within 24 hours after birth, with no visible local lesions in the joints or elsewhere. Contrary to what one might expect, I have most often found the umbilicus healthy in appearance and free from moisture, having ruptured naturally at birth.

(2) The subacute type, or the typical polyarthritis condition, which all practitioners know so well. This type shows itself from three days to three weeks after birth. Here again, and at the risk of labouring this point, I would say that in many such cases I have found the umbilicus in a healthy, well-cicatrised condition with no trace of pus or moisture, notwithstanding the fact that very marked polyarthritic symptoms were exhibited.

Although the etiology of the disease is open to much question and no organism has been isolated which can be regarded definitely as the specific cause of the infection, it was found on microscopical

* Read before the General Meeting of the Scottish Metropolitan Division of the N.V.M.A. on the 3rd November, 1920.

examination of the contents of diseased joints that there were well-marked signs of a mixed infection. Streptococci of various kinds were predominant in every case, and although I could not determine whether these organisms represented a primary or a secondary infection, *i.e.*, whether as the result of invasion by some specific organism the animal's system became a suitable medium for a secondary streptococcic invasion, I concluded that it would be a rational procedure (in view of these facts and the well-known ubiquity of the streptcocci in nature) to employ an antistreptococcic serum as an immunising agent.

At this point in my work I was faced with two questions of fundamental importance, namely, *were* all cases of joint-ill purely postnatal in origin, and if so, was the umbilicus the sole portal for infection? Having in mind the experience gained in the treatment of a large number of cases, I felt that two other very important channels could not be overlooked, namely, the alimentary tract and also the foot.

If one definitely ascribes all cases of joint-ill to post-natal infection, one is confronted with great difficulty in explaining away certain facts. For example, it would be hard to explain in this manner the origin of the so-called acute type of the disease in which death may result in from 12 to 24 hours after birth, or, in many cases, even earlier, notwithstanding the maintenance of strict hygienic conditions and the adoption of appropriate navel treatment. In a number of cases the mares foaled in the open. In some extraordinary cases the mares were carefully watched before foaling, the perineal region was washed with an antiseptic solution daily, and the foal caught when born in a waterproof sheet that had previously been soaked in an antiseptic solution. In spite of all this care, the foal developed joint-ill two days after birth and died on the third day.

In the light of these facts I decided to conduct my prophylactic treatment along two main lines :—(1) to treat the mare during pregnancy, and (2) to treat the offspring immediately after birth. Messrs. Parke, Davis and Co. very kindly consented to prepare for me, and place at my disposal, an unlimited supply of a polyvalent antistreptococcic serum for this treatment. The first year that I took up this work the foaling season was nearly over before I started, but I managed to procure eight mares whose foals had had joint-ill during either of the previous two foaling seasons. Seven c.c. of polyvalent antistreptococcic serum were injected hypodermically into each mare in the usual way on about the tenth day before the expected date of foaling; seven c.c. were again injected on the third day before foaling, and three and a half c.c. was injected into each of the foals when they were about three or four days old. In each case, with the exception of one foal, which died as the result of foaling, the foals were born healthy, did well, and no case of joint-ill subsequently occurred.

The following year I started at the beginning of the season, and during the foaling period injected sixty in-foal mares. This time I doubled the dose of serum, for inasmuch as the polyvalent serum conferred a possible immunity, it was reasonable to expect that large doses would give a greater degree of protection. Accordingly, fourteen c.c. were given about the tenth day before foaling and fourteen c.c. about the third day before the foal's birth. The foals each received seven c.c. 24 to 48 hours after birth. It was considered rational to treat the foal as soon after birth as possible. During the whole season not a single case of joint-ill was observed in the foals of the injected mares. Seventeen of these mares had during previous seasons given birth to foals that had developed joint-ill. A number of the mares in the surrounding district were not injected, and the offspring of four of them developed joint-ill, which proved fatal. The mares received no other special treatment, and were allowed to foal in the usual foaling boxes. As is my usual practice, antiseptic tape was given to the owners in case the umbilicus required ligaturing. The umbilical cords were dressed with tinct. iodi.

A point which struck me during this particular season, and which had not been noticed when only half the dose of serum was used, was that practically every mare carried her foal a fortnight, and in some cases even longer, over her normal foaling period. The foals were born strong, with a thick coating of hair, and in most of them the umbilical cord ruptured naturally and was not ligatured.

These foals were sired by eight different stallions. In this connection I would like to say that several years ago a well-known stallion travelled in the district, and it had been affected with pink eye the previous winter. Although all the mares which this stallion served showed typical equine influenza symptoms shortly after service, they

produced healthy foals, and in no case did joint-ill result. This point, I believe, is also of some little importance, as it has been asserted by some writers that joint-ill symptoms and cases of fistulous withers have been frequently observed in the progeny of mares that have suffered from strangles and influenza.

During the past season between eighty and ninety pregnant mares were similarly treated with polyvalent serum before foaling, with splendid results. Ninety-nine per cent. produced foals which remained free from joint-ill; a certain number of foals, of course, were lost from various other causes. The foal, however, which did develop joint-ill and died was the offspring of a mare that held a bad record, for she had lost her foals from joint-ill at the previous two foalings. This season was the first time that she was injected prior to foaling. Fourteen of the mares referred to had previously given birth to foals that had developed the disease. As before, a number of different stallions had been used as the sires of these foals.

In the December, 1919, number of the *Journal of Comparative Pathology* a very lengthy and able report was given by Sir John McFadyean on the etiology and serum treatment of joint-ill. Unfortunately, this report deals with the treatment of the disease with an antistreptococcic serum after the condition had already established itself. From the report it appears that the serum was manufactured as the result of information obtained by the bacterioscopic and cultural examination of a large number of diseased joints which were forwarded to the laboratory after the death of the foals. The number of cases examined in this way in two years is given as 72, and in 62·5 per cent. streptococci appeared to be the cause of the disease. No opinion, however, is expressed in the report as to the probability of post-mortem decomposition having set in in these affected limbs.

A serum was produced from strains of streptococci isolated from these diseased joints. This serum was supplied to practitioners, and detailed results of cases treated are given, which show 50 per cent. of fatalities. It was advised not to use this serum as a prophylactic, except for foals born on premises in which joint-ill had previously occurred during the season. The value of the serum as a prophylactic must necessarily have suggested itself to the author. The report also deals with the difficulty of obtaining reliable figures with regard to the annual death-rate of foals from joint-ill when left untreated. The mortality, I believe, would be very much higher than it is ever thought to be if the disease had been a scheduled condition and statistics kept. Sir John, in summing up, states that, in his opinion, the use of polyvalent serum as a prophylactic is based on theories which he considers erroneous.

I do not venture to pass an opinion on such an able report. From a process of simple reasoning, however, it seems somewhat difficult to estrange oneself from the belief that the foal after birth is placed in a strongly-fortified position to ward off disease-producing organisms by increasing the power of the pregnant mare's blood to eradicate these organisms. And it would appear that this might be accomplished through the use of a serum which confers passive immunity, and holds good whether the infection is pre-natal or post-natal.

I am fully aware that the particular line of preventive treatment which I have taken up during a number of years in the past has been questioned in some quarters; but the results I have obtained have amply justified my continuation of the work. Agriculturalists and Clydesdale breeders of the present day are a progressive body of men, and are guided by results and experiences. I am gratified to know that now a number of our most prominent breeders are adopting this line of prevention in their studs.

In view of my experience, I feel as much confidence in advising an owner to have his mare treated in this way as I would in advising him to have his child vaccinated against smallpox. The use of polyvalent serum is a method of treatment still comparatively undeveloped; its future possibilities are high, and they can only be developed fully by close co-operation between the clinician and the laboratory worker.

From practical observations in the field I have drawn certain definite conclusions, namely:—

(1) Clydesdales, as a class, stand at the top of the list as subjects which are predisposed to joint-ill. I think there is no breed of horse which has been more tampered with, and been so much inbred as the present-day Clydesdale; it has been modelled to suit the public taste in the same manner as a lady's costume is modelled by a tailor. Inbreeding means a delicate constitution and low disease-resisting powers of the offspring.

(2) Certain mares have a tendency to produce foals which develop joint-ill. This is an all-important matter, and it is, I think, a very strong argument in favour of selected breeding mares being submitted to as careful and detailed an examination and survey of their past history as stallions are subjected to under the Horse Breeding Act.

(3) As to the period of the year when the animal is best born, I am of the opinion that the end of May is early enough for Clydesdale foals, taking Scotland all over. This gives the mother a period at grass, the value of which cannot be over-estimated as a purifier of the blood system of the mother and offspring.

In conclusion, Gentlemen, I am looking forward to the publication of reports from the various bodies which are at work on this subject, and sincerely hope some fresh light will be thrown on this important condition.

DISCUSSION.

Mr. J. TAYLOR asked, in view of the results Mr. Peggie had obtained with the prophylactic treatment, if he considered joint-ill to be mostly of pre-natal origin. He also had had excellent results with the same serum when used as a prophylactic, and he agreed as to the advisability of having mares examined and history charts kept as to breeding records.

Mr. A. SPREULL asked if Mr. Peggie had ever experienced abortion in the mares as a sequel to the serum injection, and also what results he had obtained in the treatment of joint-ill with the serum. He agreed with the opinion that infection was pre-natal, and cited two cases in support of his contention. He supported Mr. TAYLOR with regard to the examination of mares.

Mr. J. D. FULTON recommended a vaccine prepared by Dr. BUCHANAN, of Glasgow.

Mr. WATT expressed the opinion that it might be useful to make microscopical examinations of fluid from the joints of foals born dead. He had used the Clydesdale Horse Society's serum, and had had good results.

Mr. CAMERON, Berwick, dealt with the treatment of joint-ill with agents such as potassium iodide and other internal antiseptics. He asked Mr. Peggie's opinion regarding the treatment of diseased joints.

Prof. J. R. GREIG asked whether Mr. Peggie considered the serum had curative or preventive action in pre-natal infection. Since the injection of serum was made ten days previous to the expected date of parturition, he presumed if the serum had a preventive action that the infection took place within the last few days of pre-natal life, whereas if the infection occurred in the earlier stages of pregnancy, the serum was curative, and in that case better results than those obtained might be expected from serum therapy in the treatment of the foal after birth.

Mr. J. MACFARLANE, Doune, stated that he had had good results by treating the foals with serum immediately after their birth. He now intended to inject the mares before foaling.

The PRESIDENT (Mr. A. GOFTON), before calling on Mr. Peggie to reply, stated that he felt the members were much indebted to Mr. Peggie for placing before them the results of his experience in the prevention of joint-ill. Mr. Peggie was one of their younger members, and he trusted that the good example he had set might be followed by others. His own experience of joint-ill was limited. Mr. Peggie's practice lay in the centre of one of the largest Clydesdale breeding districts in Scotland, and some of Mr. Peggie's clients had expressed to him their faith in the treatment as a consequence of the results obtained.

Mr. Peggie, in reply to the discussion on his paper, said he had no hesitation whatever in stating, at the risk of very severe criticism, that he considered the infection in the large bulk of cases to be of pre-natal origin. He had never experienced any untoward effects and certainly never observed abortion after using the polyvalent serum. The results obtained in the treatment of cases had been very good. He gave one ounce of the serum as an initial dose followed by half ounce doses in most cases daily. Mr. Peggie said that he usually treated diseased joints with counter-irritants, and got better results by this method than when he used fomentations. He had observed sudden collapse of the patient when badly distended joints were surgically treated. The injection of antistreptococcic serum is regularly followed by an increase in the phagocytic power of the leucocytes of the blood. It is evident therefore that the serum has both protective and curative value.

Concluding, Mr. Peggie said he believed the foal is subject to infection *in utero* during the whole period of pregnancy, any bacterial blood invasion of the dam being transmitted to the foal in this manner.

MILK AND DAIRY INSPECTION.*

By E. J. BURNDRED, M.C., M.R.C.V.S., D.V.H.,
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With a Milk Bill again on the horizon, the question of a pure milk supply is being given prominence, and it is of paramount importance, especially as the Tuberculosis Order is being held up in order that it may be re-introduced at the same time as the Orders and Regulations of the Milk Bill, that veterinary surgeons should prepare for this special branch of their work.

To be successful, the dairy inspector must make himself familiar with all the problems of the industry, and he can give great assistance to the farmer, and at the same time gain his confidence, by discussing such subjects as the value of the different feeding stuffs, labour-saving devices and machinery, diseases affecting the milk supply, milk recording, etc.

* Read before the Lancashire Veterinary Medical Association on the 30th November, 1920.

Before visiting dairy premises he should make himself familiar with the Orders and Regulations affecting his visit, and his powers thereunder. His duties will naturally depend on the conditions of his appointment, but I would suggest that reports submitted by us should be on more or less standard lines, such as a score card system.

A description of the buildings, with rough plan showing drainage and water supply, the condition of utensils and methods of cleansing, the condition of the cowsheds, the quality, age, and condition of the cattle, the condition of the milkers and methods of milking, the after-care of the milk, are probably the most important things which require to be embodied in the report, and these could conveniently precede the description of a cow or cows showing evidence of disease.

The report could then be concluded by stating the action taken in respect of animals which in his opinion are diseased and likely to affect the milk. The best time to arrive at a farm for inspection is just before milking time; it is not then necessary to ask many questions, but sufficient to use one's ordinary powers of observation, and follow the milk from the cow to the churn.

When the cows are all being milked, the udders are then examined. It is advisable to wear a dark coloured coat or overall, and passing along quietly at the rear of the cows, handle each quarter of each udder. Here, again, a definite method is advisable; say, commence with the teat, palpate the sinus and gland tissue of each posterior quarter and the supramammary lymphatic glands; then pass to the anterior quarters. In this way alterations of temperature, pain, indurations, and hypertrophy or atrophy are noted, and in these cases the naked eye appearances of the milk of the particular quarter should be observed.

Pronounced swelling, accompanied by heat and pain, and marked changes in the milk, would probably, but not definitely, rule out tuberculosis; whereas, on the other hand, firm nodules, neither hot nor painful, or a diffuse induration with hypertrophy, but not accompanied by pain or heat, together with enlargement of the supramammary lymphatic gland of the quarter, would be more or less indicative of tuberculosis.

The examination of the udders being completed, it will probably be necessary or advisable to take samples of milk; it will, therefore, be convenient to discuss here the various kinds of samples taken or examination for tuberculous infection.

A *Special* or unmixed sample is one taken from the udder, or one or more quarters of the udder, of a cow showing some abnormal udder condition that is more or less indicative of tuberculosis.

A *Control* sample is one which contains the milk of cows, the udders of which appear to be, on clinical examination, free from tuberculosis.

A *Mixed* sample is a sample of country milk brought into town by road or rail, or milk of a dairy, the cows belonging to which are out at grass when the inspector makes his visit, and examination of their udders is not possible.

During routine dairy inspection special samples will be taken from udders which show some abnormality more or less suspicious of tuberculosis; and a control sample containing milk from all the remaining cows. In taking these samples it is extremely important that the greatest care be taken to prevent contamination. The udders and teats should be cleaned and wiped over with a clean damp cloth; the milker's hands should be clean; and milk should be drawn direct from the teat into a sterilised bottle, rejecting the fore milk, and taking care that the milk does not come in contact with anything during its passage into the bottle.

It is advisable to take as large a sample as possible from a diseased quarter and allow it to stand for an hour or so. When ready for examination, the upper portion can be poured away; the remainder, if bacilli are present, will contain a rich sediment. When taking a special sample of milk it is important to take a description of the cow in order that she may be easily identified later.

A control or mixed sample may be tuberculous, and it is then necessary for the veterinary inspector to visit the farm in order to ascertain which cow or cows are causing the infection.

As probably four to six weeks will have elapsed since the sample was taken, it will be necessary for him to ascertain the number of milking cows on the premises, the number newly purchased or calved, and date of purchase or calving, number sold or lying off and when sold or laid off, and if any cows show or have shown udder defects. He will then proceed as indicated above.

To be continued.

The Veterinary Record.

1st January, 1921.

AN APPEAL.

This is the first issue of the *Veterinary Record* as the official organ of the National Veterinary Medical Association of Great Britain and Ireland. As young editors, we wish to make on this occasion a special brief appeal to our fellow members. Our President has contributed what may be termed a benedictory epistle on another page, in which he explains the object of this new departure in the veterinary literature of this country. We also reproduce the editorial note which the late regretted and much-beloved Mr. John Malcolm had contemplated inserting in the journal when it was to be issued under his direction. But death robbed us at a critical moment in the history of the profession of one whose long ripe years of experience, integrity, and geniality commended him at once as the man most suitable to render articulate the views and needs of the Association through its official organ. In a time of anxiety we were approached by the Council of the "National" to take up the task thus left unfulfilled. We could not but feel sensitive to the high compliment of being regarded capable of performing the exacting work demanded of us, and, moreover, felt it a solemn duty to lay before the Council whatever services we could render to it. It is thus we start, not without full knowledge of the gloomy forebodings expressed by some regarding our undertaking.

Confident, however, in the merits of the cause we have at heart, we are not forseeing failure. We have constituted ourselves the willing servants of our fellow members—it is their and our advancement which we intend prosecuting in the columns of this journal—and, profoundly beset with the idea that their enthusiasm and help will carry us lightheartedly along, we see ahead nothing but success. We therefore here make an earnest appeal for their support.

The taking over of a periodical is indeed no new departure in the history of Associations. In fact, almost all great bodies of professional men have now found it necessary to adopt this method of mutual intercourse and propagation of information—instance, the British Medical Association, the American Veterinary Medical Association.

Hitherto the volume of published material emanating from the veterinary profession, and especially the practitioners, in this country, has been small compared with that of our colleagues abroad, and this in spite of the fact that the British practitioner, is, so far as keenness of observation and shrewdness of judgment are concerned, second to none. There is thus lost to posterity a tremendous amount of what may without exaggeration be denoted priceless information. The distinguished founder of this journal, Mr. William Hunting, never ceased to reiterate this view, and his constant appeal to his professional brethren was to describe and *record* their observations. It is by such methods primarily that we can hope to elevate ourselves as a body and add to the sum total of human knowledge. Moreover, as has been pointed out by more than one eminent member of our profession in this country, the most effective mode of propaganda is to increase our own competence, and this can only be obtained by study, exchange of views, and submitting each of us our own little quota of information to the common fund. It will be our endeavour to deal courteously and yet justly with every literary contribution which our fellow members care to submit to this, *their* journal.

CATTLE PLAGUE.

Cattle plague has recently made its appearance dangerously near our shores and those who still retain some memories of the ravages caused among stock in this country by its visitations in the sixties and seventies will, no doubt, have felt a good deal of uneasiness. We therefore print in this issue a translation from our distinguished French contemporary, the *Revue Générale de Médecine Vétérinaire*, dealing with the known facts concerning the appearance of this dread disease again in Western Europe after an interval of about half a century

A perusal of the methods adopted successfully by the French authorities to cope with the threat-

ened invasion makes remarkable and interesting reading, and indicates what progress has been made in devising methods for combating infectious diseases since the time when the scourge previously attacked the herds of France. The conclusions, in particular, are reassuring and comforting, for it would now seem that in a civilized country this malady has lost a great deal of its sting. With the thorough application of rationally-devised sanitary police measures and methods of prevention which are distinctly veterinary both in conception and adoption, it seems that the scourge can be held in check and stamped out altogether within a comparatively short period of time. It is where conditions are different—in uncivilized or half-civilized countries—that the plague must still exact a heavy toll.

The control of infectious diseases in animals is indebted a great deal to the brilliant school of French epizootiologists. But we cannot on this occasion allow to pass unnoticed a similar triumph which has only recently been accomplished by our own fellow-countrymen in a field which presented even greater difficulties. Cattle plague (or rinderpest) has been pre-eminently one of the pestilences of war. It has followed in the wake of armies where there have been great movements of live-stock for purposes of food, and the ordinary natural or political barriers that separate and protect countries from invasion have been broken down; witness particularly the Napoleonic wars and the Franco-Prussian war.

The great outbreak which spread over Africa in the nineties is believed to have had its inception in the movements of stock caused by the Italian military operations in Somaliland in 1890.

In five years the disease had reached South and West Africa, so that in 1897 the Transvaal lost during the year nearly a million head of stock, and in 1897-8 the Cape lost one million three hundred thousand. The disease then abated, though in 1901-4 there was again a marked spread. It was during this South African outbreak that the well-known "simultaneous," or serum plus virulent blood, or Kolle-Turner method, was practised, although at the time serum alone seemed to produce superior results, as it still does in certain conditions.

For a number of years, however, what is now the Union of South Africa has been free from rinderpest, and in a way the inhabitants cherished a not altogether unpleasant recollection of the visitation, because with the cattle plague has also disappeared almost entirely tsetse-fly disease, due probably to the extermination of the game upon which the flies nourished themselves.

The plague, however, had remained enzootic in various parts of what was German East Africa, and in 1917 reports came to hand that owing to the military operations in that territory resulting in many movements of cattle, the plague was again spreading downwards. The Union Government became rightly alarmed, and despatched a Commission of veterinary surgeons under its Principal Veterinary Officer (C. E. GRAY) to operate in the zone of danger. A belt was formed right across the gap between the northern end of Lake Nyassa and the southern end of Lake Tanganyika. Cattle were removed from a strip of country ten to twenty miles wide in this belt south of the German boundary, and north of this strip the cattle were all immunised by a so-called "simultaneous" method along a strip 35 miles wide. North of the belt protection was afforded by the high range of mountains. The Commission fought against the disease for over a year, during which about a hundred thousand cattle were immunised successfully, and its work appeared to be terminated in July, 1918. But the disease was brought through the belt again by the retreat of the troops under the German commander at about the time of the Armistice. The cattle, however, that had been immunised withstood completely the attack, the disease was quickly exterminated, so that in March, 1919, the labours of the Commission were definitely terminated.

Abstracts and Reviews.

Warble-fly Investigations in Ireland.

Carpenter and Hewitt present the fifth of a series of reports on experiments and observations concerning with the life history of the warble-fly and methods of dealing with it. In the fourth report on this subject (*Journal of the Department of Agriculture and Technical Instruction for Ireland*, 1914, Vol. XV., No. 1) a short account was given of an attempt at exterminating the insects at Mason Island, co. Galway, by squeezing out the maggots and destroying them in the spring; but, owing to the frequent movement of cattle between the island and the mainland, the investigation had to be discontinued.

The experiments described in the present report were continued at Clare Island, co. Mayo, on the same lines. The work was commenced in 1915, and by 1920 all cattle on the island were declared free from warbles.

Clare Island, being nowhere nearer than three miles to the mainland, was very suitable, as flies were unlikely to immigrate. There were 400 to 500 beasts on an average, mostly in farms, but in part on common open land. This last fact, accompanied by some lack of sympathy on the part of the owners, made the time occupied in exterminating the maggots longer than had been originally anticipated.

The fact that calves and yearlings are more heavily infected than adults was proved.

Larvæ of both *Hypoderma bovis* and *H. lineatum* were observed.

The appended table shows the total result of examinations in each year:—

Period.	Cattle Examined.		
	Over 2 years.	Under 2 years	Total.
1915	171	314	485
1916	201	229	430
1917	196	214	410
1918	203	253	455
1919	221	217	438

Period.	Maggots Destroyed.		
	Over 2 years.	Under 2 years	Total.
1915	1,346	4,370	6,049
1916	1,390	2,892	4,282
1917	1,176	2,491	3,667
1918	384	712	1,096
1919	141	391	532

Period.	Average Number of Maggots per Beast.		
	Over 2 years.	Under 2 years	Total.
1915	7·83	14·97	12·47
1916	6·91	12·63	9·96
1917	6·10	11·64	8·94
1918	1·89	2·82	2·41
1919	0·64	1·80	1·22

In 1917 317 maggots were extracted from 10 imported cattle; average, 31·7.

In 1918 534 maggots were extracted from 12 imported cattle; average, 45·3.

In 1919 848 maggots were extracted from 14 imported cattle; average, 60·6.

In 1920 the only beast affected was one returned unsold from a fair in 1919 on the mainland, where it had remained *only two days*. Thirty-six maggots were extracted from it, thus giving an idea of the effect of even a short sojourn in a "fly area."

An important fact is that the period of emergence of ripe maggots extends from the early part of the year up to or even past midsummer, so that to exterminate the flies by killing the maggots continual observation from January to July inclusive will be necessary.

The general conclusions are that the insects can be exterminated in an isolated area by persevering efforts every year from January to July inclusive, extended over a sufficient number of years, and that in an easy district it might be possible in two years. Furthermore, imported cattle must be very carefully watched, as shown by the figures quoted.—[Prof. George H. Carpenter, D.Sc. and Capt. J. O'Neill Hewitt, M.C., *Jl. Dept. Agric. and Tech. Inst. for Ireland*, 1920, Vol. xx., No. 4, pp. 452-459.]

S. C. J. B.

Cattle Plague in Belgium.

Cattle plague, which had not appeared in Western Europe since 1870, was unexpectedly reported in Belgium at the beginning of the month of August.

The French Government learned, quite indirectly, on August 5th that several suspected centres had been observed during July, and hurried inquiry revealed the following facts:—

At the end of June a cargo of zebus from British India, consigned to Rio de Janeiro, touched at Antwerp. The animals, disembarked for re-loading on a fresh boat, were quartered in the quarantine station. Many of them died. Apparently no autopsies were made; and, in any case cattle plague was not suspected, despite the origin of the cargo. The survivors were embarked on July 6th, the destination being Lisbon, and then Rio de Janeiro.

On June 30th, July 3rd, and July 6th, three boatloads of cattle were unloaded at Antwerp for food purposes. They were cattle for slaughter and preparation for food almost immediately, and were for the most part despatched direct by rail to various abattoirs. Some hundreds only remained in the quarantine station, which had probably not been disinfected, for one to two days. Some of the contaminated animals were sent to distribution centres (Ghent, Namur, . . .), and most of these were slaughtered straight away, before the disease had developed. However, the slaughter of a few small lots was delayed, and it was amongst these that the first cases of plague appeared.

At the Ghent abattoir, which received 94 bullocks, 17 sick ones had to be slaughtered at once and three died. This happened about July 10th, and similar reports were received from Anderlecht and Namur.

Up to now the whole thing was confined to the abattoirs. Affected animals and in-contacts being all for slaughter, the sick ones were naturally disposed of fairly rapidly. The danger would probably have disappeared without suspicion were it not that, with all the favourable circumstances, one unfortunate incident occurred.

While the disease was in progress in the Ghent abattoir, a consignment of German beasts for reparation was unloaded for distribution. Infection occurred, and some of the infected animals were sent out into various country districts, and through their agency the disease was disseminated.

Notice was drawn to the serious occurrences, in Ghent, in particular, but plague was not suspected. No case was noted at Antwerp, where the cattle had not remained, and it was not until later that the zebus were suspected.

Apparently, the first cases were ascribed to a malignant form of foot and mouth disease, and it was not until July 20th that it was put down to cattle plague. A Commission was constituted, composed of Prof. Bordet, of the Pasteur

Institute of Brussels, and Profs. Gratia and Liénaux, of Cureghem Veterinary College. Cattle were inoculated with filtered urine and then with blood; all died with typical symptoms of cattle plague.

On August 5th official notice of the foregoing facts was received in Paris, and on the same day the frontier was closed to importation of animals, forage, and manure. Prefects of frontier departments were advised, as were the Commissioner-General in Alsace-Lorraine and the Allied High Commissioner for the Rhine provinces.

Arrangements were completed by the appropriate frontier services, in pursuit of orders dated August 7th and 10th, respectively.

On August 6th the Belgian Minister of Agriculture had cognisance of forty centres of plague, as follows:—

Western Flanders.—Ostend, Bruges, Roulers, Marcke (near Courtrai).

Eastern Flanders.—Ghent, Afsné, Sleizding, Wondelghem, Heusdem, Oost-Eccloo.

Brabant.—Anderlecht, Thildonck, Tirlemont, Saint Jean-Geest, Halle Beyenhoven, Rummen, Vieux Genappe.

Limburg.—Fresin.

Liège.—Liège, Rosoux.

Namur.—Namur (abattoir), Bioul.

Hainault.—Charleroi (abattoir).

Plague was also reported in the Eupen district recently annexed.

Questioned in the Chamber on August 5th, Baron Ruzette, the Minister of Agriculture, assumed that the infection was limited and that his department was not responsible. The situation was really very serious. The outbreak was spreading gradually, but it was feared that after the first onset it might become acclimatised and present an entirely different aspect.

The prohibition of all importation would not relieve France of all danger, and there is such an important amount of commercial traffic in the frontier area, especially in the northern sector, that it was feared that the disease might be indirectly introduced. Even though it were closed to all animal traffic, the frontier would be a danger if opened to the large numbers of tradesmen traversing it daily, and the six thousand agricultural labourers employed in France might constitute a serious menace.

It was considered necessary to institute a permanent sanitary control, not only on the frontier, but also in a large protection zone.

In the frontier *communes* a census of cattle, sheep, and goats was ordered and all movement prohibited. The frontier parishes and Bethune, not on the frontier, but very close, were declared infected areas; markets and fairs were prohibited, also removal of animals to any destination whatsoever; animals for slaughter had to be sent to an inspected slaughterhouse on licence.

A re-organisation of the veterinary service was found necessary, as several frontier districts had no official veterinary inspector. Three areas were constituted, and the chief inspectors of these areas were informed of the progress of the disease in Belgium, and reported on all observations and all measures adopted.

All these arrangements were confirmed by an advisory committee called on August 9th.

It was furthermore decided to suggest to the Belgian Minister of Agriculture that a serum station be instituted at Brussels, with the permission of the Belgium Government, and, if necessary, with the collaboration of the Belgian services concerned.

As early as the second day afterwards, M. Ricard, the Minister of Agriculture, in the absence of Parliament, obtained from the Ministerial and State Councils a grant of a million francs for the preparation of anti-cattle plague serum. In addition, he went to Brussels, and, in conference with Baron Ruzette, arranged that all facilities might be given to a French mission for preparing the serum, and that all information on the disease might be sent simultaneously to the Ministry of Agriculture and to the chief inspectors of the three frontier areas.

The serum centre started work at the Cureghem Veterinary College on August 24th, with MM. Nicolas and Rinjard in charge. Within two months the French mission not only succeeded in producing a sufficiency of serum, but also accumulated experimental data of considerable value. Missions sent by Holland, Denmark, Italy, Spain and Serbia visited the centre and followed the work.

The progress of the Belgian outbreak is interesting in the extreme.

During the first fortnight of August an average of ten fresh affected farms was recorded daily:—nine on the 7th, fourteen on the 10th, ten on the 13th, eleven on the 14th, and ten on the 15th, so that on August 15th there was a total of 58 *communes* with 150 farms affected, and 1,068 cattle died or destroyed.

From this moment the progress of the disease subsided; there were nine new farms affected on the 16th, nine on the 17th, two on the 18th, two on the 19th, eight on the 20th, seven on the 21st, three on the 22nd, four on the 23rd, four on the 24th, two on the 25th, two on the 26th, five on the 27th, two on the 28th, two on the 29th, four on the 30th, and four on the 31st.

In September there was a still greater improvement, with only 25 new farmsteads affected in the first fortnight.

An invasion was, however, still to be feared, by spread from the centres of infection near our frontier, in the Furnes and Courtrai districts particularly. In fact, a single suspected case was reported in a frontier farmstead in the village of Bousbecques, near Lille. Clininal examination, however, together with experimental inoculation, showed it to be a typical case of gangrenous coryza.

In October there was still further improvement; only four centres remained: one in Furnes-Wulpen, near the French frontier, one near Ghent, one in the Eupen district, and one near Namur.

On October 18th the stringent measures adopted in France were relaxed somewhat. Movement of animals was permitted in frontier *communes*, and traffic with solipeds with neighbouring Belgian *communes;* animals for slaughter were permitted to be moved to local abattoirs. In the frontier *arrondissements* and in Bethune the only prohibition remaining was as to the movement of ruminants. Prohibition of hunting, which had caused violent protests, was removed except in the frontier *communes*.

It is already probable that the plague will remain limited to Belgium and that France will escape. In any case

the supply of serum will ensure that losses will be reduced and extension from primary centres will be limited.

The Belgian sanitary services have, from the beginning, shown an optimism subsequently justified.

The system has been vigorously to isolate infected farmsteads, with slaughter of all infected beasts and contacts; burial of all infected and in-contact animals with fever, together with surface disinfection and cold storage or eating of the flesh of the contacts without fever.

Again, the observations recorded show that the creation of new centres of infection was caused, in nearly every case, by the fraudulent or accidental movement of contaminated animals; in some simply by moving uncooked fresh meat.

On the other hand, none of the indirect methods of contagion, as mentioned in all the classics, was observed. Living intermediaries, such as man, non-susceptible animals, etc., play a small part or none at all. Careful observations show that flies cannot transmit the disease.

To what should one ascribe the comparative benignity of cattle plague in Belgium?

The first theory to come to one's mind is that the virus, coming from the zebu, an animal normally highly resistant, would be attenuated and comparatively inactive. This explanation seems to be controverted on two counts. In the first place successive passages in infected animals did not produce exaltation in the degree of epizooticity; on the contrary, the progress of disease became uniformly slower; secondly, experimental inoculation with virus recovered from primary cases determined rapidly fatal cases, in fact, within the minimum recognised periods.

It thus seems that cattle plague is not so serious as it is generally assumed to be. Previously observed outbreaks, with rare exceptions, have occurred either consequent on military campaigns or in countries where sanitary measures encounter great difficulties of various kinds.

One can understand the rapid spread of the disease in a country subjected to enemy invasion, where animals are moved without any control, and one can explain the progress of plague in countries where sanitary regulations are difficult or impossible of application. The permanence of cattle plague in the East, in Egypt, or India, or outbreaks on the continent of Africa, are similarly easy of explanation. On the other hand, it is easily combated in countries which possess an adequate sanitary organisation. The outbreak in 1865 in the north of France was stamped out by intelligent intervention, while its extension in England was referable to the absence of any organised sanitary service.

The facts gathered in 1920 are reassuring. They show the value of the classical methods in a country having a veterinary organisation. It is certain that the fear inspired by the redoubtable "plague" of cattle is a great help; and, thanks to this fear, severe measures can be enacted without fear of protest and applied without fear of resistance. The fear of contagions is such that in the case of this disease one obtains that collaboration on the part of those interested which is essential for all successful intervention.—[*Revue Générale de Médecine Vétérinaire*, Nov. 15th, 1920, Vol. 29, No. 347, pp. 577-583.]

S. C. J. B.

Clinical and Case Reports.

Strychnine Poisoning in two Dogs, followed by Recovery.

By H. C. P. King, M.R.C.V.S., Kennington, S.E.

Case 1.—Scotch terrier, male, 13 years old, brought to surgery in a motor car 10 a.m., showing intense hyperæsthesia. The slightest sound or touch produced acute and prolonged convulsions, during which the limbs were fully extended; respirations panting and greatly exaggerated. Temp. 102·0° F. The dog was quite unable to stand.

The case was diagnosed as one of strychnine poisoning.

The history showed that about one hour prior to its arrival the dog had eaten some bread which had been smeared with "Battle's" rat poison.

Treatment: Administered Inject. Apomorphin. (B.P. '98) ♏ xv. immediately; this produced copious emesis in less than three minutes. After about fifteen minutes gave Syr. Chloral ʒ iss. per os, which was retained, and the dog became less rigid and more or less comatose for about one hour. The dose was then repeated. At 3 p.m. a further dose of Syr. Chloral ʒ i. was administered, and at 6 p.m. the dog was sitting up and wagging its tail. At 8 p.m. it was walking about in its kennel, and lapped some milk.

The vomit was tested for strychnine, and a good colour reaction was obtained with potass. bichrom. and strong sulphuric acid.

The dog was sent home the following day, apparently none the worse for its experience.

Case 2.—Black retriever dog, male, 3 years old, brought to surgery 9 p.m., showing hyperæsthesia and marked twitchings of muscles of the limbs and face when touched; it had great difficulty in walking.

These symptoms, together with the history that about one hour previously the dog had eaten some bread smeared with "Battle's" rat poison, led to the diagnosis of strychnine poisoning.

Treatment: Administered Inject. Apomorphin. ♏ xv., which produced emesis three times in less than three minutes. Syr. Chloral ʒ iss. was then given per os, and at 12 midnight the dog was apparently quite all right, and was then left for the night.

The dog was sent home the next day cured.

Impaction due to Worms in the Small Intestine of a Foal.

By C. Herbert Sheather, F.R.C.V.S., Regent's Park, London, N.W.1.

I was called a little while ago late in the afternoon to see a Hackney filly foal, about six months old. When I arrived she was moribund, pulseless, blowing hard, and lying down; temperature 101·5° F.

I was able to obtain the following history:—The filly had been brought up that afternoon with her dam from grass for the purpose of being weaned,

and she was then apparently perfectly all right; both were put into a box, and half-an-hour afterwards the filly was found to be blowing badly. No other symptoms were exhibited.

A post-mortem examination showed that a part of the duodenum and jejunum was packed so tightly for a space of nearly four feet with *Ascaris megalocephala* that rupture had occurred.

Association Reports.

SCOTTISH METROPOLITAN DIVISION.

A General Meeting was held in the Royal (Dick) Veterinary College on Wednesday, November 3rd. The President, Mr. A. Gofton, F.R.C.V.S., occupied the chair. The members present were Messrs. W. W. Peggie, A. Baird, J. Henderson, J. Cameron, J. Aitken, T. Bannatyne, J. Macfarlane, J. Taylor, J. Edgar, W. M. Mitchell, D. Buchanan, A. F. Lamont, S. Robson, W. C. Millar, J. R. Greig, A. Spreull, and the Secretary. The visitors included Messrs. Wm. Watt, J. D. Fulton, C. M. Walker, T. M. Mitchell and E. J. H. Sewell.

The minutes of the previous meeting, having been published in the *Veterinary Record*, were taken as read. Apologies of absence from the meeting were received from several of the members. Mr. A. Boyd, of Melrose, wrote tendering his resignation from the Society, as he felt unable to attend the meetings. The members were reluctant to accept Mr. Boyd's resignation, and the secretary was instructed to write to him requesting that he reconsider his decision. Mr. J. R. Rider, having left the district, resigned his membership.

The following gentlemen were elected members of the Society:—Messrs. S. Robson, J. Cattell, J. H. Jones, and J. Gibson. Messrs. A. B. Tully, J. D. Fulton, and E. J. H. Sewell were nominated for election at the next general meeting.

The President referred to the losses by death which had occurred since the last meeting. The Society had been unfortunate in losing one of its younger members, Capt. J. Cameron, of Berwick-on-Tweed, whose death had occurred whilst serving his country abroad in Africa. Two of their older members, one of whom had been an honorary member for a very considerable number of years, had passed away in Mr. Thomson, Aspatria, and Mr. Pottie, of Paisley. In particular, the Society had sustained a severe blow in the death of the General Secretary of the Association, Mr. Malcolm, of Birmingham.

He moved that the Society express their sympathy with the relatives of the late members, and that the Secretary be instructed to send a letter of condolence on behalf of the Society. The motion was carried in silence. Mr. Cameron, senior, who was present, replied.

Election of Office Bearers for 1921.

President.—Mr. J. Taylor.

Vice-Presidents.—Messrs. W. W. Peggie, A. Gofton, and J. Henderson.

Hon. Secretary and Treasurer.—Mr. R. G. Linton.

Auditors.—Messrs. A. Baird and J. Henderson.

Council.—Messrs. T. Connochie, J. Aitken, T. M. Inglis, and Dr. O. C. Bradley.

Demonstration of the Simplicity Equine Operating Table.

Prof. W. M. Mitchell gave a demonstration of this operating table to the members of the Society, a heavy draught horse being used for the purpose. The members showed a keen interest in the exhibition, and expressed their appreciation of the simplicity and general utility of the table. Prof. Mitchell stated that he had used the table almost daily since it was installed, and that it gave complete satisfaction.

The President moved that the members express their thanks to Professor Mitchell for his demonstration.

A paper was read by Mr. W. W. Peggie on "Observations on Joint-Ill Prophylaxis," and a discussion followed (see page 3).

The members, having expressed their thanks to Mr. Peggie for submitting to them such an interesting paper, adjourned to the Hygiene Laboratory for tea.

R. G. LINTON, *Hon. Sec.*

LANCASHIRE DIVISION.

A General Meeting was held at the Grand Hotel, Manchester, on Wednesday, 3rd November, at 3-30 p.m. The chair was taken by the President, Mr. A. W. Noel-Pillers, Liverpool, and other members present were Messrs. E. H. Stent, W. Woods, J. Hall, F. T. Blakemore, J. D. Whitehead, J. B. Wolstenholme, J. F. Rankin, H. H. Lord, J. J. Garside, E. J. Bundred, J. Holroyd, R. H. Oddy, E. F. Wood, J. H. Lomas, J. F. Dixon, G. Mayall, A. H. Leyland, E. H. Curbishley, J. R. Rigby, A. D. Minor, F. A. Ball, H. G. Hewetson, F. S. Warburton, J. W. Brittlebank, T. Hopkin, H. Bibbey, W. Ackroyd, W. A. Taylor, and J. Spruell.

Apologies for unavoidable absence were received from Messrs. R. Hughes (Oswestry), Hy. Sumner (Liverpool).

The minutes of the last meeting were read and approved.

Nominations.—Mr. W. Walker, of Wigan, Mr. T. J. Kenny, of St. Helens, by Mr. W. Woods, Wigan; Mr. John Maguire, 63 Pembroke Road, Liverpool, by Mr. A. W. Noel-Pillers.

It was proposed by Mr. Taylor, seconded by Mr. Curbishley, and carried unanimously, that the following gentlemen be elected members of the L.V.M.A.:—

Mr. Charles Wadsworth, Oldham.
Mr. J. R. Rigby, Church Road, Lytham.

The Secretary read a letter from the National V.M.A., dated 27th October, 1920, stating that at the General Meeting of the Association, held in Edinburgh in July last, it was resolved to form a Publication Committee, to consist of one elected representative from each Division, and to ask for the name of a representative from this division.

It was proposed by Mr. Wolstenholme, seconded by Mr. Mayall, and carried unanimously, that Mr. J. Spruell be appointed the member on the Publication Committee for this division.

The Secretary also read a circular letter from the Mid.-West and South Wales Veterinary Association, accompanying the following resolution:—"In view of Sir John McFadyean's motion presented at the last meeting of the Council of the R.C.V.S., and in the event of the committee appointed presenting a favourable report, namely, the admission of Professors as eligible to sit on the Examining Boards, this Association trusts the Council of the R.C.V.S. will not countenance its adoption, as such a step would be antagonistic to the welfare, progress, and interest of the profession generally."

It was proposed by Mr. Curbishley, and seconded by Mr. Garside, that this matter be referred to the Council of the L.V.M.A.

The President then referred to the death of Mr. John Malcolm, expressing deep regret at the loss of such an able man, who had done so much for the profession in general.

Mr. W. WOODS: I suppose I am one of the oldest friends of Mr. Malcolm. He never had an enemy so far as I know, and he was a man whom I certainly would have followed if he had taken a strong line on any issue. He is a very great loss to the profession. I saw him shortly before he died, and he seemed to be in perfect health, and his death came as a very great shock to me. I beg to move a resolution of sympathy to those he has left behind.

Col. J. W. BRITTLEBANK: I beg to second the resolution. I have known Mr. Malcolm for some time, and I agree with all that Mr. Woods has said. I feel sure that the profession will feel his loss for some time to come.

The resolution was carried in silence.

Pathological Specimens and Interesting Cases.

The PRESIDENT exhibited the following specimens:—

I. *Scaly Leg.*—The leg of a fowl, showing the microscopical appearance of the disease commonly known as "Scaly Leg," due to a mange mite *Cnemidocoptes mutans.* This disease appears to be much more prevalent than one has been led to believe. Affected poultry soon recover with care and proper attention. They should be isolated and the fowl house, etc., disinfected.

II. *Tuberculosis of the Cow's Udder and Supramammary Lymphatic Gland*—showing the microscopical appearances of the affected parts.

III. *Microscopic Section of Cow's Udder affected with tuberculosis mastitis*, showing giant cell formation.

Mr. WOLSTENHOLME—*Intestinal Calculus, with Symptoms of Intermittent Diarrhœa in the Horse.* I purchased a heavy draught gelding in May, 1909; the horse was then four years old. On August 7th, 1920, it was destroyed on account of age and being worn out. On post mortem examination a large smooth calculus, twenty-six pounds in weight, was found in the colon. During all the time the animal was under my supervision the horse was very healthy and not subject to colic, except at intervals, when it had diarrhœa from some unknown cause, and the discharge was very fœtid.

Probably the calculus was the cause of the diarrhœa.

Mr. E. J. Bundred, M.C., M.R.C.V.S., D.V.M., read a paper entitled "Milk and Dairy Inspection." The following gentlemen took part in the discussion:—The President, Col. Brittlebank, Messrs. Whitehead, Curbishley, Bibbey and Mayall. (See page 6.)

The President asked for suggestions as to the date of the next meeting, as they had a very interesting paper to be read. It was unanimously decided that the next meeting be held at the Grand Hotel, Manchester, on Wednesday, 8th December, 1920.

Before bringing the meeting to a close, the President proposed a hearty vote of thanks to Mr. Bundred for his interesting paper. This was seconded by Col. Brittlebank, and carried unanimously.

Col. Brittlebank proposed that a copy of the following resolution from this Division regarding the manufacture and sale of tuberculin be forwarded to the National V.M.A.:—

> That this Association is very strongly of the opinion that the manufacture of Tuberculin should be in Government hands, and that the sale of Tuberculin should be confined to veterinary surgeons, medical practitioners, and other persons approved by the Ministry of Agriculture.

This resolution was seconded by Mr. Stent, put to the meeting, and carried unanimously.

JOHN SPRUELL, *Hon. Sec.*

Notes and News.

Cattle Plague Memories.

Recent restrictions consequent upon foot-and-mouth disease have been irksome alike to stock-breeders and farmers, but they have not been attended by the serious loss and far-reaching effects of "the plague" of 1883-4. There are yet some old farmers who have very vivid memories of the drastic lines eventually adopted to stamp out that plague, and present-day stock-breeders may be interested in some reminiscences which an old Lincolnshire farmer gave me a few days ago of the visitation of the "rinderpest," or "cattle plague," referred to. He told me that no matter where you went—on the way to church, in church and inn, and at the markets—there was continuous reference to this all-absorbing subject. The popular songs and ballads of the day dealt with it and divers means were adopted to ward it off. Some farmers lighted huge fires around their farms, believing that the germs of infection might be burned or killed by smoke, or that they might find the local conditions so unpleasant that they would seek pleasanter quarters. There were prayers in church, and heaven was stormed with very homely, extempore supplications for stock to be spared. For a time, however, even the shouted prayers from the village chapels and the less vociferous requests from other places seemed of no avail—but let the old Lincolnshire farmer tell his own story.

"'I was born,' he said, 'at Hogsthorpe—(the very name tells us of the early days when swine were the main wealth of rural England)—and many of the farmers round about and over a wide area lost all the cattle they possessed. The saddest sights, however, were to see the poor cowkeepers who had only one or two beasts which were ordered to be shot. The authorities at the last end of the time insisted on every beast which showed any signs ot being "amiss" to be shot and burned in quicklime. If one beast in a byre or crew (crew is a Lincolnshire word for fold-yard) got the plague, or the inspectors thought it had it, the whole lot had to be put down. Of course there were some angry scenes amongst some farmers, who were convinced that their stock "hadn't t' plaag" (as they called it). All "cattle-driving," of course, was stopped, as it had been in former days of which old men still talked when I was a lad. All cattle marts were closed, but the stock-breeders seemed to come to the markets more than ever, and to stand about in groups and sit in the inns drinking gin and shaking their heads. The East Yorkshire and Lincolnshire farmers have always been noted for their laughter and humour and for seeing fun when they shouldn't—often at a funeral—but they had very long faces and no laughter left during the cattle plague. I remember one farmer who was ordered to shoot a famous Shorthorn cow, the name of which I forget, but think it was something Rose. He declared she was all right, and, seizing the inspector's gun, said he would shoot the first man who attempted to harm her. "I'd rather you'd shoot me or my missis as that cow," he said; "she's no more got smitten with t' plaag than the Archangel Gabriel." Just then the cow gave a tremendous cough and brought up a large piece of carrot which had been stuck in her gullet. "That's the plaag she's been suffering from," said her owner, as pleased as though a reprieve from death sentence for himself had arrived. There was, of course, no milk to be sold, and I fancy that this plague was the beginning of the regulations with regard to lime-washing pens at cattle markets, and cattle trucks on the railway being treated in the same way.'"—BEBE, in *Live Stock Journal.*

Foot and Mouth Disease.

"A very black cloud is hanging over a number of our leading herds of cattle and flocks of sheep. In the case of Maisemore (Gloucester) a life's study and work is in the balance. Only a road divides that estate from an infected farm, and only a hedge between the new Maisemore farm and another infected place, while a third case of the disease is but three miles away.

"Besides Maisemore there are other herds and flocks dangerously near the peril of destruction.

"There is a black shadow over Gloucestershire, Herefordshire and Shropshire. Many a life's work is in the balance; many a herd of wonderful cattle and faultless sheep stand on the brink of disaster."—*Live Stock Journal*, 24th December, 1920.

Outbreak in Birmingham.

Birmingham's thirty years' immunity from foot-and-mouth disease has been broken this week by an extensive outbreak at the central meat market. The chief veterinary surgeon of the Corporation was first called on Sunday night to examine some suspected cattle which arrived from country markets in the Midlands, and they were promptly slaughtered. Since then the disease has developed on an extensive scale, and yesterday about 400 cattle were slaughtered. Some of these were but slightly affected: others had not shown symptoms, but had been in contact with animals suffering from the disease. Herefordshire is already an affected area, and it is suspected that contagion was carried from there by way of Gloucester.

The market has been closed for disinfection purposes, and the Ministry of Agriculture has scheduled large areas in the counties of Warwick, Worcester, Stafford, Shropshire, Derby, Oxford, Leicester, Gloucester, and Northampton.—*The Times*, December 29th, 1920.

Outbreak in Lincolnshire.

The Ministry of Agriculture reports that the existence of foot and mouth disease has been confirmed on the premises at Old Clee, in the Borough of Grimsby.

"The Minister of Agriculture has issued an Order which takes immediate effect prohibiting the movement of animals into or out of or within a scheduled district having a radius of about 15 miles around the infected premises."—*The Times*, 24th December, 1920.

Cattle Plague in Belgium.

The most recent centre of cattle plague was detected at Welkenraedt (Liège), on November 16th. From that date up to December 15th no further case of the disease was observed.—*La Semaine Vétérinaire*, December 23rd.

Cattle Plague in Poland.

This disease has broken out in Poland, especially in Volhynia and the district of Bialgstock, and is spreading rapidly. Official notice of its existence has been given and the German authorities are taking all the necessary precautions to prevent its introduction, for the menace from this direction is necessarily much greater than from Belgium.—*La Clinica Veterinaria.*

Army Veterinary Service.

The *London Gazette, Supplement*, December 14th, Regular Forces, Army Veterinary Service.

Capt. T. J. Davis, to be acting major while holding the appointment of D.A.D.V.S., from July 22nd, 1919, to April 9th.

Temp. Capt. F. G. Sikes relinquishes the acting rank of major (September 30th).

Temp. Capt. F. G. Sikes relinquishes his commission on completion of service (September 30th), and is granted rank of major.

Supplement, December 23rd.

REGULAR FORCES.

Temp. Capt. A. E. Willett relinquishes his command on completion of service (April 7th, 1919) and retains the rank of Captain.

TERRITORIAL FORCE.

Capt. L. F. Eady, late R.A.V.C., to be Capt., with precedence as from July 15th, 1916, and to command a Cavalry Mobile Veterinary Section (December 24th).

Supplement, December 10th.

TERRITORIAL FORCE.

Lt.-Col. E. D. Johnson, O.B.E., T.D., is appointed D.A.D.V.S. of a Division (December 11th).

University of Liverpool—Faculty of Medicine. School of Veterinary Science.

Degree of Bachelor of Veterinary Science (B.V. Sc.) Second examination, Part II. (Physiology), December, 1920.

The following candidates have satisfied the examiners:—A. M. Fulton, H. Thornton, J. W. Thwaite.

EDWARD CAREY, *Registrar.*

Austrian Veterinary Surgeons' Relief Fund.

The following donation has been received:—

Sikes, C. W. B., Warwick £1 1 0

Further contributions should be made payable to the Hon. Secretary and Treasurer, F. Bullock, 10 Red Lion Square, London, W. C. 1.

Correspondence.

Duties of a Veterinary Meat Inspector.

Sir,—Mr. Hayhurst lately gave an address on this subject. May it be permissible to make some remarks thereon for the benefit of those who are studying for the new D.V.S.M. examination? The power to examine and seize unsound food conferred by the Public Health Act, 1875, and the Public Health (London) Act, 1891, is vested in the Medical Officer of Health and the Inspector of Nuisances or Sanitary Inspector. No meat inspector, veterinary or otherwise, is mentioned, so that unless power is given to a veterinary surgeon appointed to inspect meat under some local or municipal Act or Byelaws, he has no locus standi and his actions under the Public Health Acts would be illegal, unless he was appointed, not as a meat inspector, but as an Inspector of Nuisances or as a Sanitary Inspector. Moreover, the 108th Section of the Public Health (London) Act, 1891, states that a Sanitary Inspector must be a holder of such certificate as the Ministry of Health may from time to time approve. The certificate at present approved is that of the Sanitary Inspector's Examination Board, London, so that to act under the Public Health (London) Act, a veterinary surgeon must hold that certificate and be appointed as a Sanitary Inspector, not as a Meat Inspector. Would Mr. Hayhurst be so kind as to inform us where he obtains the power to inspect, seize, and have destroyed unsound carcasses, so that students may know that in studying for the D.V.S.M. they can, if successful, obtain appointments and have power to seize unsound food, even if they are not qualified to act as Medical Officers or Sanitary Inspectors?

STUDENT.

A Masonic (Veterinary) Lodge in London.

STATION VETERINARY HOSPITAL,
BORDON, HANTS,
December 26th, 1920.

The Editors,

Dear Sirs,—I shall be glad if you can find space in your next issue for this letter asking for views and suggestions from those interested as to the advisability of starting a Masonic Lodge (Veterinary) in London. A very large number of our profession are prominent freemasons, and I have long felt that a Lodge in our Metropolis would supply a much felt want for British veterinary freemasons. If it meets with approval, I should be happy to do all in my power in the matter and would like to hear from those who fall in with the suggestion, stating their Lodge and rank in the Craft. Thanking you in anticipation.—I am, yours very truly, RICHARD SCOTT, Capt. R.A.V.C. (Temp. Command), P.P.G.J.W., Cumberland and Westmorland.

A few days ago Mr. Panter, farm bailiff to Mr. Trevor Spencer, M.R.C.V.S., of Kettering, was found shot. Through a misunderstanding Mr. Spencer's death was wired instead of that of Mr. Panter to a London paper. The report was contradicted and apologised for, but as it is just possible some of our readers may have seen the original report and not the correction, we are glad to say Mr. Spencer's many friends may be reassured by the fact that he is in the best of health and as vigorously active as ever.

OBITUARY.

WILLIAM ROBERTSON, M.R.C.V.S., Kirkintilloch.
Graduated Edinburgh, May, 1894.

Mr. Robertson's death resulted from blood poisoning, contracted whilst engaged in his professional duties. A native of Harthill, Lanarkshire, where he conducted a blacksmith's business, Mr. Robertson subsequently qualified at the Veterinary College, Edinburgh, and, as a practitioner, was a great favourite with the farming community. He was in his 62nd year, and is survived by Mrs. Robertson and three of a family.—*North British Agriculturalist.*

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